

XIV. — A Preliminary Account of the
Thysanoptera of Borneo.—By RICHARD S.
BAGNALL, F.L.S.

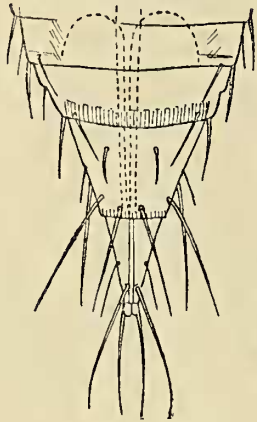
AT Mr. Moulton's request I write this brief review of the Thysanoptera of Borneo. Although many Malayan and Indo-Malayan species have been described in recent years, only two species had, until very recently, been recorded from Borneo, namely, *Adiaphorothrips simplex* and *Dinothrips sumatrensis*. Mr. G. E. Bryant, however, whilst collecting small Coleoptera in the neighbourhood of Mt. Matang in the winter of 1913-4, made a small collection of Thrips which has proved to be one of the most interesting collections I have yet examined, containing many new species, including the types of some very interesting new genera, and also adding considerably to our knowledge of the Malayan Thysanoptera.

Mr. Bryant's collection shows that the Thrips of Borneo are somewhat specialized, and it would well repay other entomologists to make special collections in this obscure group. The minute flower-loving species, at least, should be collected into about sixty per cent. of alcohol. I should welcome material from other correspondents resident or journeying in Borneo, and take this opportunity of conveying to Mr. G. E. Bryant my hearty thanks for his carefully collected material. I also owe my gratitude to the Editors of the *Annals and Magazine of Natural History* for the loan of three of the blocks reproduced herein.

Suborder TEREBRANTIA.

Family THRIPIDÆ.

(a) *Physothrips* group.



MEGALUROTHRIPS TYPICUS, Bagn., end of abdomen.

Genus MEGALUROTHRIPS, Bagn.

Megalurothrips typicus, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 590.

Described from a single example taken by Mr. Bryant, and forming the type of a new genus characterized chiefly by the abnormal 9th and 10th abdominal segments.

W. SARAWAK, Mt. Matang, one female. Caught on the wing, December, 1913 (G. E. Bryant).

(b) *Thrips* group.

Genus ISONEUROTHRIPS, Bagn.

Isoneurothrips orientalis, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 593.

Also new and forming, together with an Australian species, the genus *Isoneurothrips* separated from *Thrips* s. str. by having both veins of fore-wing regularly set with setæ.

W. SARAWAK, Mt. Matang, two females and one male, taken by Mr. Bryant in a white flower at about 1000 ft. altitude.

Suborder TUBULIFERA.

Family IDOLOTHRIPIDÆ.

Genus ACANTHINOTHRIPS, Bagn.

Acanthinothrips annulipes, Bagnall, 1914.

Ann. & Mag. Nat. Hist. ser. 8, xiv. p. 378.

A fine large species described from examples taken by Mr. Bryant, and readily distinguished from the Australian species *A. spectrum* (Hal.), and the recently described Javanese form *A. nigro dentatus*, Karny, by the distinctive coloration of the legs. In some specimens the stems of antennal joints 5 and 6 are greyish-yellow in colour.

W. SARAWAK, Mt. Matang, up to 2000 ft., December, 1913-January, 1914. On the wing, by beating dead leaves and on dead bark (G. E. Bryant).

Genus KLEOTHRIPS, Schmutz (= *Dracothrips*, Bagn.).

Kleothrips, sp.

There are three examples (varying extraordinarily in size) of a species of this genus differing from *K. gigans*, Schmutz (= *Dracothrips ceylonicus*, Bagn.) in its shorter tube, which is only about 5·5 times the length of the head. It comes nearer to *K. simplex* (Bagn.), from the Philippines, the type of which is in the British Museum, and with which I hope to compare the Bornean examples in the early future.



HOLUROTHRIPS ORNATUS,
Bagn.

W. SARAWAK, Mt. Matang, December, 1913, and Quop, March, 1914.

Family HYSTRICOTHRIPIDÆ.

Genus HOLUROTHRIPS, Bagn.

Holurothrips ornatus, Bagnall, 1914.

Ann. & Mag. Nat. Hist. ser. 8, xiv.
p. 376.

A bizarre form described from two examples taken by Mr. Bryant, and forming the type of the genus.

W. SARAWAK, Mt. Matang, two examples from amongst decaying leaves, December 2nd, 1913 (G. E. Bryant).

Family PHLÆOTHRIPIDÆ.

(a) *Macrothrips* group.

Genus MACHATOTHRIPS, Bagn.

Machatothrips biuncinatus, Bagnall, 1908.

Originally described from South New Guinea, this species has since been recorded by Dr. Buffa from Penang, Sumatra, and the islands Mentawai and Engano.

W. SARAWAK, Mt. Matang, one male taken on dead tree with *Ecacanthothrips bryanti*, sp. n., December 17th, 1913 (G. E. Bryant).

Genus ADIAPHOROTHRIPS, Bagn.

Adiaphorothrips simplex, Bagnall, 1908.

Described from two male examples taken by Mr. Th. F.

Lucassen at Sambasin May, 1890. The female is smaller, and may be recognized by its less swollen fore-legs and the smaller fore-tarsal tooth.

W. BORNEO, two males, Sambas, May, 1890 (Lucassen); W. SARAWAK, two males, Matang, from dead bark, December, 1913, and another in January, 1914; one female, Quop, March, 1914 (G. E. Bryant); not yet recorded from elsewhere.

Adiaphorothrips antennatus, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 594.

A new species separated from *A. simplex* by the shorter head, the stronger cephalic spines, and the shorter intermediate antennal joints, 3 and 4 being subequal.

W. SARAWAK, two males, one from Matang from under bark of dead tree, December 7th, 1913, and the other from Quop, March 28th, 1914 (G. E. Bryant).

Genus DINOTHRIPS, Bagn.

Dinothrips sumatrensis, Bagnall, 1908.

It seems that there are more than one species of *Dinothrips*. Schmutz describes *D. furcifer* from Ceylon, but does not compare it with *sumatrensis*, and it is desirable that his specimens should be re-examined. *D. sumatrensis* is recorded from Sumatra, Java, New Guinea, Central Tonkin, Birmania, Penang, Borneo, Singapore, and the islands Mentawai, Engano, and Nias, but it is doubtful if all these records refer to the true *sumatrensis*. In Mr. Bryant's collection there are evidently two forms, the present species being provisionally characterised by the relatively shorter and stouter third antennal joint and the distinctly longer ante-ocular spines. The third antennal joint is of a clear yellow colour, broadly banded with black basally and distally. The male is larger than the female. The other species, which may be called

Dinothrips affinis, sp. n.,

has the female larger than the female of *sumatrensis*, and in the few specimens at my disposal distinctly larger than the male. The third antennal joint is not only more slender, but distinctly longer than in *sumatrensis*, yellowish to reddish-brown, rarely darker basally, and only narrowly blackish-brown at apex. The ante-ocular spines are stout and rather short.

I hope to make a closer study of this genus from other material in my possession which is not at the moment available, and from, I hope, the large amount of material recorded by Professor Buffa.

W. SARAWAK; both species from dead bark and trees; Mt. Matang, December, 1913 (G. E. Bryant).

(b) *Docessissophothrips* group.

Genus *DOCESSISSOPHOTHRIPS*, Bagn.

Docessissophothrips laticeps, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 322.

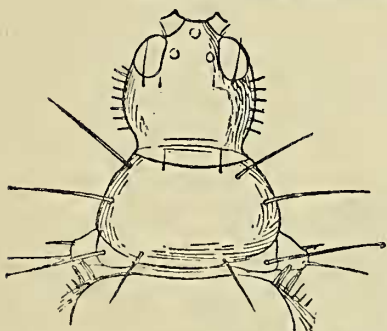
The species of this curious genus are apparently very rare; I have described five from remote parts of the world, and each is represented by but a single example. Mr. Bryant's record suggests that the extreme rarity may be due to a specialized habitat.

W. SARAWAK, one male, Mt. Matang, January 28th, 1914, under bark with termites (G. E. Bryant).

(c) *Trichothrips* group.

Genus *TETRACANTHOTHRIPS*, Bagn.

Tetracanthothrips borneensis, Bagnall, 1915.



TETRACANTHOTHRIPS BORNEENSIS, Bagn., head & prothorax.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 595.

A single male example discovered by Mr. Bryant is the type of this curious genus, chiefly characterized by the two pairs of finger-like mesonotal spines. It is quite a small insect, and apparently comes in the *Trichothrips* group.

W. SARAWAK, Mt. Matang, one brachypterous male, December, 1913 (G. E. Bryant).

Genus *ALLOTHRIPS*, Hood.

Allothrips caudatus, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 595.

Described from a single specimen collected by Mr. Bryant. Hood erected the genus—separated from *Trichothrips* by the 7-jointed antennæ, joints 7 and 8 being fused together—for a Nearctic species.

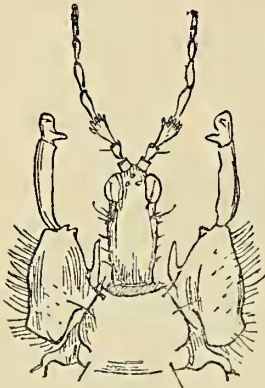
W. SARAWAK, Mt. Matang, one male, December 11th, 1913 (G. E. Bryant).

Family ECACANTHOTHRIPIDÆ.

Genus ECACANTHOTHRIPI, Bagn.

Ecacanthothrips bryanti, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 321, fig. 2.



ECACANTHOTHRIPI
BRYANTI, Bagn.

A species easily recognized by the long hairs on the fore-femora, and which I have found particular pleasure in naming in Mr. Bryant's honour.

W. SARAWAK, Mt. Matang, one male, at 1000 ft., December, 1913, on dead tree; two males, January, 1914 (G. E. Bryant).

Ecacanthothrips coxalis, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 597.

Amongst Mr. Bryant's material are several examples separated from the known species by the simple fore-coxæ of the male. There appear to be three species—a small one, an ordinary sized one, with all tibiæ clear yellow, and a black one. I have described the first under the name of *coxalis* and the second *flavipes*.

W. SARAWAK, Mt. Matang, one male, February 2nd, 1914, and one female on dead tree, December 17th, 1913; Sungei China, foot of Matang, one female to light, December 14th, 1913 (G. E. Bryant).

Ecacanthothrips flavipes, Bagnall, 1915.

Ann. & Mag. Nat. Hist. ser. 8, xv. p. 597.

W. SARAWAK, Mt. Matang, at 1000 ft., males only; one in a white flower and three on dead bark, December, 1913 (G. E. Bryant).

Genus ORMOTHRIPS, Buffa.

Ormothrips inermis, Buffa, 1909.

This species was described by Buffa from a single female from New Guinea. A single example taken by Mr. Bryant is *perhaps* referable to this species; Buffa's description is inadequate.

W. SARAWAK, one female, Mt. Matang, [December, 1913 (G. E. Bryant)].